**LISTING OF CLAIMS**:

Please amend claim 1. Claims 2 and 7 were cancelled by a prior amendment. No new matter has been added to the claims.

The following listing of claims will replace all prior versions of claims in the present application.

1. (Currently amended) A method for labeling multi material data, for a sequence of processing steps using a computer, such that the insides/outsides of two-dimensional or three-dimensional boundary surfaces may be determined, the steps including acquisition of external data, storage of cell data through octree division of the external data, and simulation using the cell data, the method comprising:

(S1) acquiring the external data composed of boundary data and physical property values of an object;

(A) inputting the external data into a computer;

(B) dividing the external data into rectangular solid cells having boundary planes orthogonal to each other;

(C) classifying each of the divided cells into a boundary cell including the boundary data, and a non-boundary cell not including the boundary data;

(D) classifying the vertices of each cell into multiple spaces partitioned by the boundary data;

(S3) performing a simulation using the physical property values for each cell; and

(S4) outputting simulation results,

wherein step (C) comprises the steps of:

further classifying each of the boundary cells into a first type cell and a second type cell, the first type cell having a cutting point at which an edge line or vertex is cut by the boundary data, the second type cell having a cutting point that lies on a boundary with another cell of different hierarchy, and the second type cell being larger than the another cell; and

assigning a material number to each cell vertex, and

wherein step (D) further comprises:

(D1) assigning all the non-boundary cells space numbers different for respective spaces partitioned by boundary data; and

(D2) assigning each vertex of the boundary cell the space number of the neighboring non-boundary cell that is not partitioned by the boundary data.

2. Cancelled.

3. (Previously presented)  A method for labeling multi material data according to claim 1, wherein step (D2) comprises a step of assigning a vertex matching the boundary data either of the space numbers of two neighboring non-boundary cells.

4. (Previously presented)  A method for labeling multi material data according to claim 1, wherein step (B) comprises a step of re-dividing the rectangular solid cells by octree division until a number of cutting points enough to reconstruct boundary shape elements forming the boundary face included in the external data are obtained.

5. (Previously presented)  A method for labeling multi material data according to claim 1, wherein step (B) comprises a step of dividing voxel data into rectangular solid cells of the same size.

6. (Previously presented)  A method for labeling multi material data according to claim 1, wherein step (D1) comprises a step of scanning all the rectangular solid cells repeatedly in sequence, or in recursive processing, in the three directions of X, Y, and Z.

7. Cancelled.